REMARKS

Claims 1-26 are pending in this application.
Claim 20 is objected to.
Claims 1-19 and 21-26 are rejected.

The office action dated September 11, 2003 indicates that claims 1-3, 5-9, 14-18, 21 and 26 are rejected under 35 USC §102(b) as being anticipated by Kobayashi U.S. Patent No. 5,835,461, and claims 16 and 25 are rejected under 35 USC §102(e) as being anticipated by Kobayashi U.S. Patent No.6,373,816 The office action also indicates that claims 4, 10-13, 19 and 22-24 are rejected under 35 USC §103 as being unpatentable over Kobayashi in view of others. These rejections are respectfully traversed.

Claim 1 recites a method of reading a block of data stored on an optical disc. The data block includes header information. The method comprises synthesizing header information for the data block; recovering actual header information from the disc; and recovering actual user data from the disc. The user data is phase-shifted by a phase difference between the synthesized and recovered header information.

The method of claim 1 addresses problems caused by phase discontinuities between data blocks on a read/write optical disc. The method of claim 1 can be used to navigate through these phase discontinuities during readback of the data blocks. Navigating through the phase discontinuities can mitigate disruptive effects such as loss of error correction capability. Mitigating the disruptive effects can reduce manufacturing cost and the number of re-reads. The method of claim 1 avoids the use of edit buffers.

Kobayashi '461 appears to use the very thing that is avoided by the method of claim 1. Kobayashi uses "linking areas," and ""postambles" and "postbuffers" between clusters of data. See column 12, lines 5-14.

The office action contends that "user data being phase-shifted by a phase difference between the synthesized and recovered header information" is disclosed at col. 8, lines 14-17 and col. 8, line 65 to col. 9, line 13 of Kobayashi '461. It is not. The passage at col. 8, lines 11-24 discloses a recording operation in which recording data is stored in memory 34, modulated, and output to an optical head 32. The data to be recorded is supplied by an unillustrated unit.

The passage starting at col. 8, line 65 discloses a phase lock loop (PLL) for locking onto a signal generated by a mark detection circuit 36 and a mark cycle detection circuit 40 (these circuits 36 and 40, which detect marks formed in the wobbled pregroove 2 of the optical disc 1, are described at col. 65, lines 41-64). A phase comparator 42 detects the phase difference between the signal generated by a VCO 44 (via divider 45) and the signal generated by the mark cycle detection circuit 40. Col. 8, line 65 to col. 9, line 6 merely describes the construction of the PLL 41. Col. 9, lines 12-13 indicate that the output of the VCO 44 is supplied to sector counter 46.

The sector counter 46 uses the VCO output to generate a sector start pulse (see col. 9, lines 17-20). Control circuit 38 uses this pulse to move the optical head 32 to a predetermined track position on the disc 1 (see col. 9, lines 21-25). Thus, the phase difference detected by the comparator 42 is not used to shift the user data, it is used to position the optical head 32; and the phase difference detected by the comparator 42 is not between synthesized and recovered header information.

For these reasons, Kobayashi '461 does not teach or suggest the method of claim 1. Therefore, claim 1 and its dependent claims 2-14 should be allowed over Kobayashi '461.

Claim 15 recites an apparatus including means for recovering actual user data from a disc, the user data being phase-shifted by a phase difference between the synthesized and actual header information. For the reasons above, claim 15 should be allowed over Kobayashi '461.

Claim 16 recites an apparatus including a circuit for determining a phase difference between recovered actual and synthesized header information; and a circuit for phase-shifting recovered user data by the determined phase difference. For the reasons above, claim 16 and its dependent claims 17-25 should be allowed over Kobayashi '461.

Claim 26 recites an apparatus including a circuit for determining a phase difference between recovered and synthesized header information; and a circuit for phase-shifting recovered user data by the determined phase difference. For the reasons above, claim 16 should be allowed over Kobayashi '461.

Kobayashi U.S. Patent No. 6,373,816 is no more relevant than Kobayashi '461. The office action identifies element 35 in Figure 5, and element 53 in Figure 8. According to the '816 patent, Figure 5 illustrates a wobble processing system, of which element 35 is a PLL; and Figure 8 illustrates a recording/reproducing system, of which element 53 is a recording/reproducing circuit. Kobayashi '816 does not teach or suggest a recording/reproducing system having all of the limitations of claim 16. Therefore, claim 16 and its dependent claim 25 should be allowed over Kobayashi '816.

Claim 16 has been amended to correct a typographical error and to clarify a limitation. The examiner is thanked for his suggestions.

Claims 9-11 has been amended for clarity.

The specification has been amended to correct a typographical error. The examiner is thanked for identifying the error.

The drawings have been amended to add the legend "Prior Art" to Figures 1-3. Replacement sheet 1/6 is attached.

The examiner is respectfully requested to withdraw the rejections of the claims. If any issues remain, the examiner is invited to contact the undersigned to discuss those remaining issues.